**IN THE CLAIMS:**

Please replace the pending claims with the following claims:

1-3. (Cancelled)

4. (Previously presented) The inhaleable powder composition of claim 39 wherein the particulate microstructures are porous and wherein the microstructures have a mean porosity of 0.5 - 80%.

5. (Previously presented) The inhaleable powder composition of claim 4 wherein the particulate microstructures have a porosity of 2 - 40%.

6. (Previously presented) The inhaleable powder composition of claim 39 wherein the microstructures are porous and wherein the mean pore size is 20 – 200 nm.

7. (Previously presented) The inhaleable powder composition of claim 6 wherein the mean pore size is 50 - 100 nm.

8. (Previously presented) The inhaleable powder composition of claim 39 wherein the powder composition comprises particulate microstructures in a fine particle fraction of greater than 20% w/w.

9. (Previously presented) The inhaleable powder composition of claim 8 wherein the powder composition comprises particulate microstructures in a fine particle fraction from about 30% to 70% w/w.

10. (Previously presented) The inhaleable powder composition of claim 39 wherein the bulk density is less than 0.1 g/cm$^3$.

11. (Previously presented) The inhaleable powder composition of claim 39 wherein the bulk density is less than 0.05 g/cm$^3$.

12. (Previously presented) The inhaleable powder composition of claim 39 wherein said particulate microstructures comprise hollow porous microspheres.

13. (Previously presented) The inhaleable powder composition of claim 12 wherein the particulate microspheres have a shell thickness between 0.1 - 0.5 μm.

14. (Previously presented) The inhaleable powder composition of claim 39 wherein the mean aerodynamic diameter of said particulate microstructures is between 0.5 μm and 5 μm.

15. (Previously presented) The inhaleable powder composition of claim 14 wherein said particulate microstructures have a mean geometric diameter of less than about 5 μm.

16-17. (Cancelled)

18. (Previously presented) The inhaleable powder composition of claim 39 wherein said phospholipid is selected from the group consisting of dilauroylphosphatidylcholine, dioleoylphosphatidylcholine, dipalmitoylphosphatidylcholine, disteroylphosphatidylcholine dibehenoylphosphatidylcholine, diarachidoylphosphatidylcholine and combinations thereof.

19. (Previously presented) The inhaleable powder composition of claim 18 wherein said phospholipid has a gel to liquid crystal transition temperature of greater than 40° C.

20. (Previously presented) The inhaleable powder composition of claim 39 wherein said active agent is a bioactive agent.

21. (Previously presented) The inhaleable powder composition of claim 20 wherein said bioactive agent is selected from the group consisting of antiallergics, bronchodilators, pulmonary lung surfactants, analgesics, antibiotics, antiinfectives, leukotriene inhibitors or antagonists, antihistamines, antiinflammatories, antineoplastics, anticholinergics, anesthetics. anti-tuberculars, antivirals, fungicides, immunoactive agents, vaccines, immunosuppressive agents, imaging agents, cardiovascular agents, enzymes, steroids, DNA, RNA, viral vectors, antisense agents, proteins, peptides and combinations thereof.

22. (Previously presented) The inhaleable powder composition of claim 20 wherein the bioactive agent is selected from the group consisting of fentanyl, morphine, lung surfactant, leuprolide, interferon, insulin, budesonide, formoterol, goserelin, and growth hormones.

23. (Previously presented) The inhaleable powder composition of claim 39 wherein said particulate microstructures comprise perforated microstructures.

24-38. (Cancelled)

39. (Currently amended) An inhaleable powder composition comprising a plurality of discrete particulate microstructures that exhibit decreased aggregation, said microstructures comprising a structural matrix comprising an active agent, calcium and a phospholipid, wherein said microstructures have a mean geometric diameter of 1-30 microns, a mean aerodynamic diameter of less than 5 microns, and a bulk density of less than about 0.5 g/cm$^3$.

40. (Currently amended) An inhaleable powder composition comprising a plurality of discrete particulate microstructures that exhibit decreased aggregation, said microstructures comprising a structural matrix comprising calcium, an active agent and a phospholipid, wherein said phospholipid comprises a gel to liquid crystal transition temperature of greater than 40°C, and wherein said microstructures have a mean geometric diameter of 1-30 microns, a mean aerodynamic diameter of less than 5 microns, and a bulk density of less than about 0.5 g/cm$^3$.

41. (Cancelled).

42. (Previously presented) The inhaleable powder composition of claim 40 wherein the mean geometric diameter is less than 10 microns.

43. (Previously presented) The inhaleable powder composition of claim 42 wherein the active agent is a bioactive agent.

44. (Previously presented) The inhaleable powder composition of claim 42 wherein the mean geometric diameter is less than 5 microns.

45. (Previously presented) The inhaleable powder composition of claim 42 or claim 44 wherein the bulk density is less than 0.1 g/cm$^3$.

46. (Previously presented) The inhaleable powder composition of claim 45 wherein the bulk density is less than 0.05 g/cm$^3$.

47. (Previously presented) The inhaleable powder composition of claim 40 wherein said phospholipid is selected from the group consisting of dilauroylphosphatidylcholine, dioleoylphosphatidylcholine, dipalmitoylphosphatidylcholine, disteroylphosphatidylcholine, dibehenoylphosphatidylcholine, diarachidoylphosphatidylcholine and combinations thereof.

48. (Cancelled)

49. (Previously presented) The inhaleable powder composition of claim 43 wherein said bioactive agent is selected from the group consisting of antiallergics, bronchodilators, pulmonary lung surfactants, analgesics, antibiotics, antiinfectives, leukotriene inhibitors or antagonists, antihistamines, antiinflammatories, antineoplastics, anticholinergics, anesthetics, anti-tuberculars, antivirals, fungicides, immunoactive agents, vaccines, immunosuppressive agents, imaging agents, cardiovascular agents, enzymes, steroids, DNA, RNA, viral vectors, antisense agents, proteins, peptides and combinations thereof.

50. (Previously presented) The inhaleable powder composition of claim 43 wherein the bioactive agent is selected from the group consisting of fentanyl, morphine, lung surfactant, leuprolide, interferon, insulin, budesonide, formoterol, goserelin, and growth hormones.

51. (Previously presented) The inhaleable powder composition of claim 43 wherein the bioactive agent is an aminoglycoside antibiotic.

52. (Previously presented) The inhaleable powder composition of claim 20 wherein the bioactive agent is an aminoglycoside antibiotic.

53. (Previously presented) The inhaleable powder composition of claim 20 wherein the bioactive agent is a fungicide.

54. (Previously presented) The inhaleable powder composition of claim 43 wherein the bioactive agent is a fungicide.

55. (Previously presented) The inhaleable powder composition of claim 39 wherein the phospholipid comprises a zwitterionic phospholipid.

56. (Previously presented) The inhaleable powder composition of claim 40 wherein the phospholipid comprises a zwitterionic phospholipid.